



**Environmental Assessment/Finding of No Significant  
Impact for the Relocation of the River Valley  
Middle and High School Campus  
Marion, Ohio**

**Prepared for:**

***U.S. Army Corps of Engineers***

***Louisville District***

**Louisville, Kentucky**

**Total Environmental Restoration Contract  
DACW27-97-D-0015 Task Order C005**

**December 2000**

**ENVIRONMENTAL ASSESSMENT/FINDING OF NO SIGNIFICANT IMPACT FOR  
THE RELOCATION OF THE RIVER VALLEY  
MIDDLE AND HIGH SCHOOL CAMPUS  
MARION, OHIO**

**December 2000**

**Prepared For:  
United States Army Corps of Engineers  
Louisville, Kentucky**

**...  
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Novi, Michigan**

**Total Environmental Restoration Contract  
DACW27-97-D-0015 Task Order 0005**

**Finding of No Significant Impact  
River Valley Schools  
Relocation of the Middle and High School Campus  
Environmental Assessment**

**Proposed Action**

The proposed action is for the Army to participate in the permanent relocation of the River Valley middle and high school campus to a new site within the existing school district boundaries. As a result of the permanent relocation, the existing 78 acre campus would be made available for industrial or commercial use after the United States Army Corps of Engineers (USACE) has completed its environmental restoration clean up.

The new campus would contain an approximately 110,000 square foot high school building, high school modular units, an approximately 65,000 square foot middle school building, an administration center, a Vocational Agriculture barn, vehicle parking lots, and possibly a school bus garage. Sports facilities such as a football field and stadium, football practice fields, an all-weather track, soccer fields, tennis courts, softball field, baseball fields, an outside storage building, two concessions stands, and an athletic facility/storage building would also be constructed. The final design of the proposed facility would be completed upon selection of the new site by the River Valley Local School District.

**Alternatives Considered**

Four alternatives were examined as a part of the Environmental Assessment:

- Alternative 1 – Construction of School at Baker Site
- Alternative 2 – Construction of School at Cook Site
- Alternative 3 – Construction of School at Undetermined Site.
- Alternative 4 – No-Action Alternative.

The analysis of the potential environmental impacts of the alternatives are documented in the aforementioned Environmental Assessment. The potential for environmental impact on soil, air quality, geology, water resources, vegetation, wildlife, climate, topography, population, and the local economy are discussed in the Environmental Assessment. Relocation of the River Valley middle and high school campus will not significantly impact the environment.

**Finding of No Significant Impact**

A careful review of the Environmental Assessment has concluded that the implementation of the Proposed Action of relocation the River Valley middle and high school campus at any of the three alternative sites (Alternative 1, 2, or 3) will not have a significant impact on the quality of the existing natural or human environment. The requirements of the National Environmental Policy Act have been satisfied and an Environmental Impact Statement will not be prepared.

\_\_\_\_\_  
Date

\_\_\_\_\_  
ROBERT E. SLCKBOWER  
COL Corps of Engineers  
Commander and District Engineer

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## ACRONYM LIST

|          |   |
|----------|---|
| AOEC     | area of elevated concentrations (surface and subsurface)              |
| AR       | Army Regulations  |
| ERA      | Baseline Risk Assessment  |
| CAA      | Clean Air Act   |
| CEQ      | Council on Environmental Quality                                      |
| CERCLA   | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR      | Code of Federal Regulations   |
| CWA      | Clean Water Act   |
| DAPC     | Division of Air Pollution Control                                     |
| DoD      | Department of Defense   |
| DQO      | Data Quality Objectives   |
| EA       | Environmental Assessment  |
| EIS      | Environmental Impact Statement  |
| EPA      | Environmental Protection Agency                                       |
| ESA      | Endangered Species Act  |
| FEMA     | Federal Emergency Management Agency                                   |
| FONSI    | Finding of No Significant Impact                                      |
| FUDS     | Formerly Used Defense Sites   |
| MED      | Marion Engineer Depot   |
| MID      | Marion Industrial Depot   |
| MSL      | Mean sea level  |
| NAAQS    | National Ambient Air Quality Standards                                |
| NEPA     | National Environmental Policy Act                                     |
| NHPA     | National Historic Preservation Act                                    |
| NPDES    | National Pollutant Discharge Elimination System                       |
| NRHP     | National Register of Historic Places                                  |
| NWI      | National Wetlands Inventory   |
| Ohio EPA | Ohio Environmental Protection Agency                                  |
| OU1      | Operable Unit 1   |
| PM10     | Particulates 10 microns in size or less                               |
| RI       | Remedial Investigation  |
| RVLSD    | River Valley Local School District                                    |
| RVS      | River Valley Schools  |
| SHPO     | State Historic Preservation Office                                    |
| SWPPP    | Stormwater Pollution Prevention Plan                                  |
| TCE      | Trichloroethene   |
| TERC     | Total Environmental Restoration Contract                              |
| USACE    | United States Army Corps of Engineers                                 |
| USARLTA  | United States Army Reserve Local Training Area                        |
| USCS     | Unified Soil Classification System                                    |
| USDA     | United States Department of Agriculture                               |
| USEPA    | United States Environmental Protection Agency                         |
| USFWS    | United States Fish and Wildlife Service                               |
| VOCs     | Volatile Organic Compounds  |

## 1.0 INTRODUCTION

This Environmental Assessment (EA), prepared pursuant to the National Environmental Policy Act (NEPA) of 1969, evaluates the potential environmental impacts of the proposed Department of the Army (Army) participation in the permanent relocation of the River Valley (RV) middle and high school campus in Marion, Ohio. The NEPA requires federal agencies to consider environmental consequences of their proposed actions in the decision-making process. Environmental consequences include potential impacts to the natural, cultural, and socioeconomic environments. This EA contains descriptions of the proposed action, alternatives to the proposed action, affected environment, and the potential environmental consequences of the proposed action and alternatives. This EA will be available for public review and comment prior to the final determination of environmental impacts by the Army.

This EA was prepared in compliance with the following federal and state laws, regulations, and policies applicable to the proposed relocation of the RV middle and high school campus:

- National Environmental Policy Act (NEPA) of 1969
- Council of Environmental Quality (CEQ) Regulations, "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," 40 Code of Federal Regulations (CFR) 1500-1508, dated 10 August 1982 and subsequent rules and regulations
- Army Regulations (AR) 200-1 Environmental Protection and Enhancement
- AR 200-2 Environmental Effects of Army Actions
- Clean Air Act (CAA) of 1970, as amended
- Clean Water Act (CWA) of 1977
- Endangered Species Act (ESA) of 1973, as amended
- National Historic Preservation Act (NHPA) of 1966
- Executive Order 12898, Environmental Justice
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Farmland Protection Policy Act, 7 USC 4201-4209



## **2.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION**

### **2.01 DESCRIPTION OF THE PROPOSED ACTION**

The RV middle and high school campus is located at 1239 Columbus-Sandusky Road (State Route 98), on the eastern 78 acres of the former Marion Engineer Depot (MED) (Figure 1). The existing campus includes a middle school, high school, administration offices, and supporting sports facilities. The proposed action would result in the permanent relocation of the existing RV Middle and high school campus to a new site within the existing school district boundaries. As a result of the permanent relocation, the existing 78 acre campus would be made available for industrial or commercial use after the United States Army Corps of Engineers (USACE) has completed its environmental restoration clean up.

The new site would contain an approximately 110,000 square foot high school building, high school modular units, an approximately 65,000 square foot middle school building, an administration center, a Vocational Agriculture barn, vehicle parking lots, and possibly a school bus garage. Sports facilities such as a football field and stadium, football practice fields, an all-weather track, soccer fields, tennis courts, softball field, baseball fields, an outside storage building, two concessions stands, and an athletic facility/storage building would also be constructed. The final design of the proposed facility would be completed upon selection of the new site.

Section 3.0 of this EA describes the proposed alternatives for the permanent relocation of the existing RV middle and high school campus. Section 4.0 describes the existing environment at the current 78 acre campus and at the proposed alternative sites. Section 5.0 evaluates the potential environmental impacts of the alternatives being evaluated in this EA, and addresses temporary support activities that would be required during construction of the proposed facility. Section 6.0 presents the references utilized in preparation of the document. The list of preparers is provided in Section 7.0, and the list of persons and agencies consulted during preparation of the document is provided in Section 8.0.

### **2.02 PURPOSE AND NEED**

The purpose of the proposed action is for the permanent relocation of existing RV middle and high school facilities to a new site. The relocation action is the result of a Cooperative Agreement between the State of Ohio, River Valley Local School District and the U.S. Army.

### **2.03 BACKGROUND INFORMATION**

In 1942, the Ohio River Division of the Army Corps of Engineers received authorization to construct an engineer equipment, maintenance, and storage depot near Marion, Ohio. The former MED operated for approximately 19 years thereafter as the largest depot of its type in the United States. The main purpose of the depot was for the storage and renovation of heavy construction machinery for the U.S. Army. During World War II, Prisoners of War were encamped at the depot, and were employed to perform labor and mechanical work. Following the war, the former MED continued to operate until 1961. Land on the east end of the depot was acquired by the RVLSD in 1961 for the construction of middle and high school facilities.

Historical aerial photographs depict large areas of the RV middle and high school property as void of vegetative cover. Personal accounts of past MED activities have indicated that the property was frequently used for the disposal of construction debris and other waste materials. Disposal activities are said to have included, but may not have been limited to, trenching, burning, and burial of refuse and waste, including fuels, paints, spent solvents, and solid materials.

Since 1961, the property has been owned by the RVLSD and operated as a school site with associated educational and sports facilities. The property currently contains middle and high school buildings; temporary classrooms and administrative buildings; football, track, basketball, and softball facilities; practice ball fields; a nature preserve area; and parking lots. The existing RVLSD middle and high school population exceeds over 800 students and faculty.

### **3.0 ALTERNATIVES CONSIDERED**

This section describes alternatives for the proposed RV middle and high school campus relocation action, including alternative site locations for the construction of new school facilities. Four alternatives are being evaluated in this EA. Three alternatives were evaluated as potential relocation sites for the existing RV middle and high school campus: Alternative 1 – Construction of School at Baker Site; Alternative 2 – Construction of School at Cook Site; Alternative 3 – Construction of School at Undetermined Site. A fourth alternative was also considered, Alternative 4 – No-Action Alternative. The alternatives are described below, and are listed without respect to preference.

#### **3.01 ALTERNATIVES DEVELOPMENT**

Four project alternatives were developed for further evaluation based on the site selection criteria established by the RVLSD Board of Education. According to the RVLSD, the factors considered in selection of a relocation site include location, zoning, traffic, noise, atmospheric conditions, accessibility, site drainage, availability of infrastructure amenities, site orientation, site adaptability, development implications, public services, outdoor activities application, site detractions, site maintenance implications, political implications, and master planning factors. A copy of the proposed site selection rating sheet is attached as Table 2. As noted earlier, a site for the relocation has not been determined. It is expected that the RVLSD will select the relocation site based upon the siting criteria.

Except for the No-Action Alternative, all the proposed alternatives appear to meet the selection criteria and the purpose and need for the project. The No-Action Alternative would not meet the purpose and need for the project but was retained for further consideration in accordance with NEPA requirements. The preferred action is the relocation of the campus with construction of new school facilities at a new location. Figure 3 shows the locations of the existing RV middle and high school campus, and also shows locations of the Baker and Cook sites. As the undetermined site has not been located, its location is not depicted on the figure. The preferred construction alternative will be selected after thorough consideration of environmental impacts at the potential relocation sites. Section 4.0 evaluates the potential impacts of these alternatives on the natural and human environment.

##### **3.01.01 Alternative 1-Construction of School at Baker Site**

Alternative 1 is the construction of new school facilities at the Baker site. The Baker site is located approximately 3 miles east of the city of Marion, on the east side of Highway 98, approximately 0.5 miles south of Hwy 95. The 85-acre site is situated in the southern half of the southeast quarter of Section 29, T06S, R16E, Town of Claridon. This site is currently in use as

an agricultural field for soybean production. The Baker site property boundaries are defined to the east by the Clendenan Ditch and to the west by Hwy 98. Active agricultural fields border the site to the north. A field that had been in agricultural production borders the site to the south. During the site inspection, this field was noted as containing what appeared to be recently constructed utility trenches. The future intended use of this property has not been determined. An active farmstead is located west of the Baker site and across Highway 98. Other active farmsteads are located to the north of the Baker site. Under this alternative, remediation of the existing RV middle and high school campus would occur following the relocation action.

### **3.01.02 Alternative 2-Construction of School at Cook Site**

Alternative 2 is the construction of new school facilities at the Cook site. The Cook site is located approximately 4 miles east of the city of Marion, on the northwest corner of Highway 95 and Brockelsby Road. The 80-acre site is situated in the southeast quarter of the southeast quarter of Section 21 and the southwest quarter of the southwest quarter of Section 22, T06S, R16E, Town of Claridon. The Cook site is currently in use as an agricultural field for corn production. A farmstead is located on this property, including a house, barns, garage, and storage shed. The exact dates of construction of the structures on the site has not been determined. This site also contains a buried concrete vault, whose construction integrity, contents, and former use have not been determined. Four hand-pump potable water wells were also noted at the site. The Cook site property boundaries are defined to the south by Hwy 95, to the east by Brockelsby Road, and to the west by an unnamed drainage ditch that connects to Riffle Creek. A mature growth forest extends across the northern boundary of the site. The Claridon Elementary School (Claridon School) is located just west of the Cook site, across an unnamed drainage ditch. The Clairdon School is currently operating. However, as a result of the relocation activity by the RVLSD, and with the passing of the millage on November 7, 2000, the Claridon School is expected to be relocated to another site, as yet undetermined. This relocation will combine the existing three elementary schools into two elementary schools. These two new elementary facilities are expected to be constructed and operational by 2003. An active farmstead is located to the south of the Cook site, across Hwy 95. Other active farmsteads are located to the east and northeast of the site. Under this alternative, remediation of the existing RV middle and high school campus would occur. Remediation activities would be expected to commence following completion of construction of the new middle and high school facilities. The existing RV middle and high school campus would be vacant during remediation activities.

### **3.01.03 Alternative 3-Construction of the School at an Undetermined Site**

Alternative 3 is the construction of new school facilities on an undetermined site. The property would most likely be situated within the RVLSD boundaries. No site-specific information is available on this undetermined location. Under this alternative, remediation of the existing RV middle and high school campus would occur following the relocation action.

#### **3.01.04 Alternative 4 -No-Action Alternative**

Under the No-Action Alternative, the existing RV middle and high school campus would remain at its current location. The US Army Corps of Engineers would conduct the necessary remediation at the site in accordance with applicable federal and state regulations. The construction of a new school at an alternative site would not occur.

#### **4.0 AFFECTED ENVIRONMENT**

Section 4.0 describes the natural and human (man-made) environment that could be affected by the proposed RV middle and high school campus relocation action. A specific description of the existing environment at the current RV middle and high school campus, the proposed Baker site, and the proposed Cook site is provided below. Specific environmental conditions and subsequent impacts (see Section 5.0) at the undetermined location could not be evaluated for the undetermined site of Alternative 3. However, general environmental conditions that are typical of the project area would be applicable to the undetermined site.

The information in this section was developed from site visits, and the following referenced reports:

Soil Survey of Marion County, Ohio. United States Department of Agriculture, 1989;

Ground Water Resources of Marion County Map, Katie Schafer Crowell. Ohio Department of Natural Resources, 1979;

Drift Thickness Map of Marion County Ohio, Vormeiker, Joel. Ohio Department of Natural Resources, 1985.

#### **4.01 LOCATION DESCRIPTION**

##### **4.01.01 Geography and Landscape**

Marion County lies within the Scioto Lobe of the Indiana-Ohio Till Plain. The surface features include nearly level plains and basins, gently sloping hills, and a few moderately steep valley sides. The topographic features are generally uniform. Local topography is generally flat, with elevations in the range of 986 to 994 feet above mean sea level (MSL). The RV middle and high school campus and potential relocation sites have similar geographic features.

The rural landscape of the area is open agricultural fields with interspersed patches of woods. The more developed industrial area near the existing RV middle and high school campus contains less cultivated fields or natural wooded areas than the potential relocation sites although a farmstead and wooded area do occur just south of the existing RV middle and high school campus.

#### **4.01.02 Climate**

The climate of Marion County is classified as continental. The average temperature during the winter is 27 degrees Fahrenheit and the average temperature in the summer is 71 degrees Fahrenheit. The most extreme temperatures for this area have ranged from minus 23 degrees Fahrenheit to 101 degrees Fahrenheit. The total annual precipitation for Marion County is about 34 inches. Approximately 60% of the annual rainfall occurs between April and September. The local record for rainfall during one 24-hour period is 3.94 inches. The average annual snowfall is approximately 26 inches. On average, snow (at least one-inch) is on the ground 25 days each year. The most snow measured at one time in Marion County is 18 inches. The average relative humidity in mid afternoon is about 70%. The humidity generally is higher at night with an average humidity at dawn of approximately 80%. The sun shines 60% of the time possible in the summer and 40% in the winter. The prevailing wind is from the south-southwest with an average wind speed of 13 miles per hour (winter).

#### **4.02 LAND USE**

Land use in the Marion area is predominantly agricultural with isolated residential and commercial properties. The RV middle and high school campus provides institutional use as well as recreational uses at the athletic fields and nature preserve. The existing RV middle and high school site is located in a rural area surrounded by commercial and light industry to the east (Marion Industrial Center), north (commercial facilities along State Route 309), and east (GTE facility). Sparsely populated farmland and residential properties are also present to the north, southeast, and south of the RV middle and high school campus. The U.S. Army Reserve Local Training Area (USAR LTA) borders the existing RV middle and high school property to the southwest.

Agricultural and residential properties are also the dominant land uses near the alternative relocation sites. The Baker site is a cultivated soybean field surrounded by agricultural land on all sides. A farmstead is located across Highway 98 from the western border of the Baker property. The property adjacent to the south border of the Baker site appears to be under development, as noted by the trenches which likely are associated with utilities for a mobile home park. The Marion County Zoning Department was contacted regarding this apparent development. The Zoning Inspector was unaware of the development, but stated that permits are not required prior to breaking of ground for residential developments.

The Cook site is a cultivated cornfield and homestead bordered by adjacent farmlands. The homestead includes a house, barns, garage, storage shed, and concrete foundations of former structures. A buried concrete vault was noted at the Cook site. Its contents and former use have not been determined. Farmhouses are located to the east of the Cook property, across Brocklesby Road, and also to the south side of the Cook property, across Highway 95. Claridon Elementary School currently occupies the land within a few hundred feet of the Cook site, across a

drainage ditch that borders the western edge of the Cook property. The RVLSD has obtained funding through passage of a millage on November 7, 2000, for relocation of the Claridon Elementary School. Construction of the new elementary school facilities is expected to be completed in 2003. RVLSD has committed to the community that there will be a beneficial use of the old school facility.

#### **4.02.01 Farmland Protection Policy Act**

The Baker and Cook sites were evaluated for applicability of the Farmland Protection Policy Act (FPPA). The FPPA is intended to minimize the extent to which federal activities contribute to the conversion of agricultural land to nonagricultural uses. It requires federal agencies to examine the impact of their program before they approve any activity that would convert farmland. The Baker and Cook sites are classified as consisting of Fewamo soils. When drained, the Fewamo soil group is considered under the prime agricultural land classification. Approximately 20% of Marion County consists of Fewamo soils. It is therefore likely that the undetermined site would also contain Fewamo soils. The existing RV middle and high school campus site is not used for farmland purposes, and therefore is not considered under the FPPA.

#### **4.03 AIR QUALITY**

National Ambient Air Quality Standards (NAAQS) have been determined by the USEPA. In administering the air pollution protection program, the Ohio EPA has evaluated ambient air quality conditions for regions throughout the State of Ohio. The Ohio EPA has classified Marion County as an attainment district for all pollutants. Results of ambient air testing indicates that sulfur dioxide and nitrogen oxide concentrations in the Marion area are less than the national standards. Carbon monoxide, lead, and ozone were also evaluated and found to be in attainment of the NAAQS. Total suspended particulate under 10 microns in size (TSP-PM10) concentrations were also evaluated and were determined to be unclassifiable. The entire State was evaluated based upon TSP data, with two areas being identified as non-attainment (Cuyahoga and a portion of Jefferson County). Additional monitoring was instituted in other areas of the State, and no exceedances of the NAAQS were noted. These two non-attainment areas are located several miles from the proposed alternative sites and therefore do not pose potential air quality impacts to the existing RV middle and high school campus, or the alternate relocation sites.

Air quality at the existing RV middle and high school campus has been evaluated during a series of air sampling events conducted by Ohio EPA, Division of Air Pollution Control (DAPC) and the USACE. This sampling has detected low level VOC concentrations that continue to be monitored under the environmental restoration process. There are currently no industrial air emission sources within one mile of the proposed Baker or Cook sites.



#### **4.04 NOISE**

The RV middle and high school campus, and the adjacent southern residence, are the only noise-sensitive receptors in the light industrial and commercial area near the existing site. The alternative sites are located in less developed agricultural areas with residences. One residence is located across Highway 98 from the Baker site; and what appears to be a mobile home park development is beginning construction to the south of the site. This development has not been confirmed, however what appears to be utility trenches have been constructed at this neighboring property. Three noise-sensitive receptors occur at the Cook site: two residences and the Claridon Elementary School. The RVLSD has obtained funding through passage of a millage on November 7, 2000, for relocation of the Claridon Elementary School. Construction of the new elementary school facilities is expected to be completed in 2003. Future use of the school facility has not been determined. One residence and the elementary school facility are adjacent to Highway 95. The residence on Brockelsby Road across from the Cook site is more removed from traffic-generated noise on Highway 95.

Existing noise sources at the existing RV middle and high school campus site are roadway traffic, industrial operations, and recreational noise generated from the school during sporting events. The current noise sources at the alternative relocation sites are primarily roadway traffic and agricultural machinery. Recreational noise from the elementary school is minimal due to the absence of large sporting events such as football or baseball games.

#### **4.05 GEOLOGY AND SOILS**

Marion County was covered by a series of continental glaciers during the Pleistocene Epoch of the Cenozoic Era. The bedrock in contact with the Pleistocene glacial till deposits includes both Silurian aged limestone and shale in the project area in the eastern portion of the county. Soils samples taken at the RV middle and high school site revealed clayey and silty till deposits.

Soils information for the Cook and Baker sites was taken from the Soil Survey of Marion County, Ohio (SCS, 1989). The soil at the Cook site is classified as a Pewamo silty clay loam. This very poorly drained soil is subject to ponding, is moderately slowly permeable, and has seasonal high water tables near or above ground surface. This soil group is typically poorly suited to dwellings, septic tank absorption fields, and recreational uses, and is primarily used for farmlands. The soil at the Baker site is classified as a Pewamo silty clay loam with interspersed pockets of Blount silt loam. The somewhat poorly drained Blount silt loam is typically moderately well suited to dwellings and recreational areas, is poorly suited to septic tank absorption fields, and is commonly used for farming purposes. High groundwater tables for this slow to moderately slowly permeable soil type are typically one to three feet below ground surface.

#### **4.06 WATER RESOURCES**

##### **4.06.01 Surface Water**

Surface drainage at the existing RV middle and high school campus site consists of a series of perimeter ditches and a western storm sewer that discharges into the southern flowing Clendenan Ditch (Figure 3). Clendenan Ditch discharges into Riffle Creek approximately 3 miles south of the site. Riffle Creek, which is located to the west of the RVLSD site, flows to the south, approximately 2 miles, before gradually bending to the southwest for an additional 2 miles. At this point, Riffle Creek converges with the southeastern flowing Grave Creek. The convergent flow of Grave Creek and Riffle Creek travels an additional 0.2 miles south where it discharges into the Olentangy River near the intersection of State Route 93 and Wheatstone River Road.

There are no surface water bodies present within the existing RV middle and high school campus property. The drainage ditches along the highways bordering the RV middle and high school campus collect precipitation and stormwater runoff from the site. Surface water occasionally ponds in the low-lying areas of the school property near the practice ball fields and nature preserve. This area drains to the south-southwest toward the adjacent USAR LTA.

Surface water on the Baker site is collected in Clendenan Ditch on the eastern border and a perimeter drainage ditch along Highway 98 on the west side of the property. Surface water also ponds in a low depression at the northwest corner of the site. The Cook site is drained by roadside swales along Brocklesby Road and Highway 55 and an unnamed drainage ditch on the western border that connects to Riffle Creek to the southwest.

##### **4.06.02 Groundwater**

Marion County can generally be divided into two areas of groundwater availability. The western two-thirds of the county contains readily available supplies from the underlying Silurian and Devonian-aged limestones and dolomites. The eastern portion of Marion County contains minimal amounts of potable water where the Devonian-aged shales are found beneath the clay-rich glacial till. The clayey till above the non-water bearing shale yields less than 4 gallons per minute; dry wells are not uncommon.

##### **4.06.03 Floodplains and Wetlands**

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps and National Wetlands Inventory (NWI) Maps did not indicate any floodplains or wetlands on or adjacent to the project sites. A site inspection was conducted by a biologist as part of this assessment. The site inspection revealed a small depression at the northwest corner of the Baker site that could be

classified as an isolated wetland. This area was less than a quarter acre in size. Low areas in the nature preserve at the existing RV middle and high school campus could also be considered isolated wetlands. A wetland determination would need to be conducted on this isolated area prior to commencement of construction or remediation activities.

#### **4.07 BIOLOGICAL RESOURCES**

##### **4.07.01 Vegetation**

Vegetation communities on the RV middle and high school campus site have been significantly altered by past military activities or more recent construction of the school facilities. The existing RV school site is covered by buildings, parking lots, and athletic facilities, except for one fallow agricultural field and the approximately 15-acre nature preserve. The nature preserve supports a ruderal-prairie community dominated by grasses and weedy species typical of disturbed areas. Wild carrot (*Daucus carota*), tall goldenrod (*Solidago stricta*), rye grass (*Lolium perenne*), Kentucky bluegrass (*Poa pratensis*) form the dominant vegetation.

Vegetation cover on the Baker and Cook sites is almost completely dominated by corn and soybean fields. Shrubs and trees such as smooth sumac (*Rhus glabra*), rough-leaf dogwood (*Cornus drummondii*), American elm (*Ulmus americana*), and black cherry (*Prunus serotina*) grow along Clendenan Ditch on the eastern border of the Baker site. The Cook homestead site contains landscape trees such as honey locust (*Gleditsia triacanthos*) and ruderal grasses and herbs including wild carrot, goldenrod, Kentucky bluegrass, and fall panic (*Panicum dichotomiflorum*).

##### **4.07.02 Wildlife**

Most of the existing RV middle and high school campus does not provide vegetated habitat for wildlife except for the ruderal-prairie community in the nature preserve. The grasses and flowering herbs in the nature preserve could provide food and cover for insects, birds, and small mammals.

The alternative relocation sites do not provide suitable habitat for most wildlife although food products in the cultivated fields could attract some animal species. European starlings (*Sternus vulgaris*) were seen in the soybean field at the Baker site, which attracts transient and resident wildlife near Clendenan Ditch. Tracks, fur, dens, and other evidence of wildlife such as deer, rabbits, and foxes were observed along the ditch during the site investigation. The drainage ditch on the Cook site could also attract wildlife but the weedy vegetation along the ditch provides lower quality habitat than the trees and shrubs in nearby forested areas.

#### **4.07.03 Threatened or Endangered Species**

A review of existing records and informal consultation with U.S. Fish and Wildlife Service (USFWS) was conducted to determine the presence of listed or candidate threatened or endangered species and critical habitats in the project vicinity. The USFWS lists two federally threatened or endangered species that have been noted in the Marion County area. They are the bald eagle (*Haliaeetus leucocephalus*) and the Indiana bat (*Myotis sodalis*). A site inspection was conducted for the Baker and Cook sites by a biologist as part of this assessment. The site inspection revealed no current bald eagle nesting sites or Indiana bat nesting areas on either the Baker or the Cook site. As recommended, the Ohio Department of Natural Resources (ODNR), Division of Wildlife, was also contacted to determine the location of any bald eagle nests in Marion County, to confirm that no bald eagle nesting sites would be impacted by the relocation activities. According to the ODNR, the only eagle nest located in Marion County is found along the Scioto River south of Highway 95 in Big Island Township. This eagle nest is not located near the existing RV middle and high school campus, and is not near the two identified alternative sites. It is unlikely that there would be any nesting sites potentially impacted from the relocation activities, as the bald eagle is not likely to occur within the project area since it is primarily found near rivers and large lakes that provide the fisheries that sustain the eagle's food resources. Neither of the identified sites are adjacent to large water bodies, and neither site contains suitable trees for nesting. The Indiana bat could possibly occur along the wooded riparian corridor of the drainage ditch adjacent to the Baker site. Construction of the school facilities could be managed such that they would not affect any summer habitat for the bat that could potentially occur at this site. The eastern massasauga (*Sistrurus catenatus*), a docile rattlesnake, is a federal candidate species and an Ohio endangered species. Its presence has also been noted to occur in the project area. However, neither of the identified alternative relocation sites appear to have suitable wet or wooded habitat for the massasauga. Likewise, no threatened or endangered species occur within a one-half mile radius of the existing RV middle and high school campus site.

#### **4.08 CULTURAL RESOURCES**

A search of the National Register of Historic Places (NRHP) revealed no sites within the project area that could be affected by the proposed relocation action. Cultural resources include archaeological as well as architectural components. Due to past disturbances of the sites past military activities, construction of the school facilities, or agricultural activities, it is unlikely that any significant archaeological resources would be present or intact at the Baker or Cook sites. An archaeological survey of the selected relocation site is planned to be conducted prior to construction of the new school facilities. With this effort, coordination with the State Historic Preservation Office (SHPO), designated in Ohio as the Ohio Historical Preservation Agency, will also be conducted to identify potential cultural resources within the project area. As for the architectural component, the structures on the Cook homestead could be greater than 50 years of age, which is one of the criteria considered for listing on the National Register of Historic Places.

(NRHP). A complete evaluation of the structures would need to be performed in order to determine whether they would indeed meet the criteria necessary for nomination for NRHP listing. The Baker site is currently undeveloped and does not contain existing architectural components.

#### **4.09 SOCIOECONOMICS**

The following section provides information on the socioeconomic factors for the Marion County, Ohio area, specifically pertaining to population, economy, and employment characteristics. The information is taken from the "Ohio County Profiles", prepared by the Office of Strategic Research, Ohio Department of Development.

##### **4.09.01 Population**

The existing RV middle and high school campus is located within the County of Marion, Ohio. In 1990, the population of Marion County was 64,274. The population, based on the 1990 census, for the year 2000 is estimated to be 62,200. By the year 2010, the population is estimated to decrease to 59,400. The population of Marion County is nearly equally divided between those living in urban areas and those living in rural areas with 53% of the population living in an urban setting and 47% living in a rural setting. Total minorities account for 6.6% of the population of Marion County with African Americans accounting for 4.9% of the population of Marion County. The adult population of Marion County is comprised of 73.8% high school graduates. Fifteen percent of the adult population has attained some higher education. River Valley Local School District is one of several located within Marion County. The student population for the RVLSD elementary, middle, and high schools is approximately 1825 students.

##### **4.09.02 Economy**

The total labor force in 1998 was estimated to be 31,900. The unemployment rate is estimated to be 4.2% with 1,300 people unemployed. The unemployment rate for Marion County has dropped from 7.3% in 1993 to the current rate of 4.2%. This unemployment rate for Marion County is 2.3% below the State of Ohio's unemployment rate.

The median income per household in Marion County is \$32,331. This is a 10% increase in the median income from the 1995 median income levels. The number of persons below the poverty level in Marion County dropped from 14.5% in 1993 to 12% in 1995.

#### **4.09.03 Employment**

Employment within Marion is predominantly industrial. The major employers are Arrep Corp./Kable Fulfillment Services, Bell Atlantic/GTE, Marion City Board of Education, Marion County Government, Marion General Hospital, Marion Steel Company, Meijer, Inc., State of Ohio, Whirlpool Corporation, and Wyandot, Inc. The largest employment sectors in Marion County are the manufacturing sector and the wholesale and retail trade sector. The manufacturing industry employs 7,136 people and the wholesale and retail trade employs 6,178 people. The fastest growing employment sector is the government, which employs 5,463 people, which represents a 6.6% increase over the 1997 figures.

#### **4.09.04 Recreational Facilities**

Existing recreational facilities that occur on the RV middle and high school campus include baseball, softball, and football fields. The ball fields in and near the former disposal area have been closed as part of the environmental investigation. Except for the elementary school playground, no recreational facilities currently exist near the potential relocation sites.

#### **4.09.05 Educational Facilities**

The current RV middle and high school campus date to the 1960's, with some recent additions, such as the modular units that are currently being utilized as classrooms and administrative offices. The existing facilities are outdated and in need of repair and upgrade to enhance the educational needs of the students, educators, and administrators.

### **4.10 ENVIRONMENTAL JUSTICE**

No significant low-income or minority populations are known to occur near the existing RV middle and high school campus facilities or identified alternative relocation sites.

### **4.11 INFRASTRUCTURE**

#### **4.11.01 Potable Water Supply**

A large portion of the population of Marion County uses public water supplies from groundwater and surface sources including the Little Scioto River. Water supplies at the existing RV middle and high school campus are provided by the Ohio American Water Company potable water supply system. Groundwater at the site is not used by the RV middle and high school facility.

The Baker site is currently undeveloped, and is only being used for agricultural purposes. No private or community water supplies exist at this site. The nearest public water supply which would be sized appropriately to accommodate the water demand of the new facility is a significant distance from the site. The Cook site contains an existing farmstead with a private water supply well. Several hand-pump wells are also located at this site. None of the existing potable water supplies have been evaluated for function. However, the existing water supplies would not be sufficient for the new school facility. The nearest community water supply which would be sized appropriately to accommodate the water demand of the new facility is located a significant distance from the Cook site.

#### **4.11.02 Electricity**

Ohio Edison supplies electrical power to the Marion area. Electrical power supply lines run along the road right-of-ways at both the Baker and Cook sites. A feed line currently provides power to the existing farmstead at the Cook site. No feed lines are present at the Baker site. The existing electrical power supplies would not be sufficient for the new school facility, which is expected to require 3-phase power. The nearest electrical connection which could provide 3-phase power is over one-quarter mile away from the sites.

#### **4.11.03 Wastewater**

Wastewater at the existing RV middle and high school campus site is treated via the community wastewater collection and treatment system. A private on-site wastewater disposal system exists at the Cook site, however, its current function has not been evaluated. In its current state, the on-site system would not be adequately sized to handle wastewater generated by the new school facilities. No private or community wastewater facilities exist at the Baker site. The nearest community wastewater collection and treatment system is located in Marion, and is operated by the Marion County Wastewater Department. The nearest connection to the community system that would be sized to appropriately accommodate the wastewater flows for the new facility would be over two miles from the sites. Existing land users in the vicinity of the alternate sites currently utilize on-site wastewater treatment and disposal systems.

#### **4.11.04 Transportation**

Current traffic volume estimates were not available for the traffic associated with the existing RV middle and high school campus. The current parking facilities can accommodate up to 800 vehicles, and 19 school buses currently transport students to and from the facility. A total of four bus cycles currently transport students to and from the facility, in staggered time frames associated with the school periods of the middle and high school. In addition, students are transported to the facility in private vehicles. There is currently no turn lane or traffic light to

manage traffic to or from the facility, and traffic concerns have been noted by the RVLSD at this facility. Two-lane improved roads currently exist along the frontage of the Baker and Cook sites. In addition, a side road currently exists along the eastern border of the Cook site, which is known as Brockelsby Road. The Baker site is located on Hwy 98, and the Cook site is located on Hwy 95. Both of these roads are high traffic routes, accommodating traffic to the rural outlying areas west of the city of Marion. The new facility is currently expected to contain a road access off the frontage roads, which would be Hwy 98 for the Baker site, and Hwy 95 for the Cook site.

#### **4.12 HAZARDOUS MATERIALS**

Environmental contaminants have been identified at the existing RV middle and high school campus. Remediation of the contaminants would occur after permanent relocation of the school facilities. Current time schedules estimate that the relocation would be completed by 2003. If the RV middle and high school campus is relocated, remediation would commence following completion of construction of the new facility. If the campus is not relocated (No-Action Alternative), the remediation may commence as early as 2002 and during school session breaks. Environmental monitoring of ambient air and groundwater quality would continue to occur while the school is in operation. The current RV middle and high school facility uses chemical materials in their chemistry laboratory, as well as cleaning supplies for the facility. Lawn care products are also intermittently applied to the recreational areas of the facility. An acid neutralization tank is currently used for treatment of used laboratory chemicals. Other waste chemicals are containerized before disposal.

The presence of hazardous constituents has not been evaluated at the Baker or Cook sites through intrusive or analytical measures. A buried concrete vault is present on the Cook property. Its contents and former use have not been determined. As both the Baker and Cook sites have been used for agricultural purposes, application of pesticides, herbicides, and fertilizers likely have occurred.



## 5.0 ENVIRONMENTAL CONSEQUENCES

This section discusses the potential environmental impacts related to the proposed relocation of the RV middle and high school campus. This assessment evaluates both the long-term and short-term consequences of the proposed action and alternatives, including the No-Action Alternative. As discussed in Section 3.0, the preferred action is the construction of new school facilities at one of the three alternative sites. The preferred construction alternative will be selected after thorough consideration of environmental impacts at the potential relocation sites. The environmental impacts for the construction alternatives are not expected to vary significantly for the three alternative relocation sites, including the undetermined site, due to similar environmental conditions in the project area.

Environmental justice was excluded from the discussion since no significant minority or low-income populations occur in the project area. A table has been prepared, which describes the impacts associated with the alternatives, for each of the descriptors listed below. This table is attached as Table 1.

### 5.01 LAND USE

The proposed relocation action would affect existing land use patterns at the existing RV middle and high school campus site, as well as at the proposed alternative relocation sites. The RV middle and high school site is expected to be used for commercial or industrial purposes following remediation. Although the commercial or industrial use designation would be compatible with the general land use of the area, the residence just south of the site could be adversely affected by new industrial operations next to their property. Commercial or industrial activities are not likely to affect the USAR LTA site since it is currently adjacent to the Marion Industrial Center. In addition, relocation of the campus would likely result in removal of the existing recreational areas at the site.

Land use would also be affected at the proposed Baker and Cook alternative relocation sites. Existing agricultural and residential land uses at these sites would be replaced by more extensive institutional land use. Institutional and recreational land uses associated with the new facilities could have adverse effects on adjacent property owners.

The No-Action Alternative would not affect adjacent residential land use or military land use at the RV middle and high school campus site, or agricultural and residential use at the alternative relocation sites. Remediation activities conducted at the existing campus site would present short-term adverse impacts, primarily associated with the active remediation phase. Completion of the remediation activities would provide positive impacts, by enabling re-utilization of the recreational areas of the facility.

#### **5.01.01 Farmland Protection Policy Act Applicability**

Implementation of the proposed action could present Farmland Protection Policy impacts. The Baker and Cook sites are currently under agricultural production. Relocation of the school campus to either of the sites would remove the sites from farmland classification. Both of the sites consist mainly of Pewamo soils that, if drained, are considered prime agricultural land. However, twenty percent (53,000 acres) of Marion County consists of soil in the Pewamo classification. Discussions with the Marion Soil and Water Conservation District have revealed that neither site may qualify for protection under the FPPA. Once final selection of the alternative relocation site has occurred, and prior to the construction of the new school facilities, further evaluation will need to be conducted to determine whether a Farmland Conversion Impact Rating Form needs to be completed. If it is determined to be necessary, one will be completed in coordination with the Marion Soil and Water Conservation District.

#### **5.02 AIR QUALITY**

The proposed relocation action would not have a significant long-term adverse effect on air quality at the alternative sites. Impacts to air quality could be presented by vehicle emissions and school chemistry lab emissions at the alternative sites. Increased traffic to the sites would be expected to present minor increases in combustion-related constituents that are typically found in vehicle emissions. However, sites being evaluated as Alternatives 2 & 3, are located along heavily used transportation routes with current exposures to vehicle emissions, and therefore any additional impacts would not be significant. The proposed high school facility is expected to have chemistry lab facilities, which will include interior ventilation systems to capture and exhaust fugitive chemical emissions related to chemistry activities. Studies conducted at University chemistry facilities have indicated that emissions from the lab ventilation systems are not significant. As the high school facilities would be on a much smaller scale than the University facilities, the potential impacts to ambient air quality posed by the chemical lab exhaust systems are expected to be minor. No ventilation system exhaust scrubbers are planned to be installed at the facility. Short-term air quality impacts may be experienced at the existing RV middle and high school campus during remediation activities, and at the alternative relocation sites during construction of the new facility. Measures can be implemented to control air emissions during these activities.

Under the No-Action Alternative, the existing vehicle emission and chemistry lab emissions would be maintained at the existing RV middle and high school facility. Remediation of the site would occur while the institutional use of the site continued. Potential short-term adverse impacts could be presented by fugitive dust emissions generated during soil disturbance, and from construction vehicle exhaust emissions. Measures could be implemented to control fugitive dust emissions during remediation activities. No impacts to air quality would potentially occur at the alternative sites under the No-Action Alternative.

### 5.03 NOISE

Increased noise levels, anticipated as a result of the proposed action at the alternative relocation sites, would be associated with construction activities, outdoor sporting events held at the school, and increased vehicular traffic at the site. The primary noise source during the construction activities would result from the operation of heavy equipment. These impacts would be short-term, only occurring during the construction of the school facilities. Outdoor sporting events and increased roadway traffic would present relatively short duration and intermittent noise increases, occurring over the life of the use of the school. The noise increases would likely occur during the weekday school hours, after school hours on Wednesdays, Fridays, and Saturdays, and occasionally during daytime hours on Saturdays. Operation of the new school facilities could have long-term adverse impacts on noise-sensitive receptors, such as adjacent residences. As the Claridon Elementary School is expected to be relocated in 2003, noise generated during operation of the new facility would not impact the Claridon School and students. However, construction activities for the new facility are expected to occur prior to relocation of the Claridon School students. Therefore, the Claridon School would be expected to experience short-term impacts from construction-related activities. Future use of the school facility has not been determined. It is expected that the future user of the Claridon School site will experience noise impacts from the operation of the new RV middle and high school facility. Following relocation of the RV middle and high school campus, the existing RV middle and high school campus will be remediated. Future use of the site is anticipated to be for commercial or industrial purposes. Noise levels are expected to increase during remediation activities, but will be short-term in nature. Noise levels from future commercial or industrial operations at the existing RV middle and high school campus site are expected to be comparable to existing conditions.

Under the No-Action Alternative, no noise impacts would occur at the alternative relocation sites, as no construction activities, school sporting events, or school traffic increases would occur. Short-term adverse noise impacts would occur during completion of remediation activities at the existing RV middle and high school campus. Remediation activities would be expected to occur during school session breaks, minimizing the impacts to the school noise receptors (students, faculty). Following completion of remediation activities, current noise levels would be maintained at the existing RV middle and high school campus site.

### 5.04 GEOLOGY AND SOILS

The proposed action would have a minor effect on the soils at alternative relocation sites due to construction activities such as excavation, grading, and re-contouring of the soil. Minor increases in soil erosion could occur due to removal of vegetation and disturbance of the surface soils. Any soil erosion would be temporary and localized to the construction areas. Standard erosion control measures (i.e., limiting the amount of surface exposed at any one time and

moistening the exposed areas to stabilize dust particles) should be followed during construction activities to limit the impact to the soils. Upon completion of the construction activities, the soils would regain their stability by being overlain by pavement or vegetation. Remediation at the current RV middle and high school campus would likely present short-term adverse impacts to the soil at the site. Although the exact method for remediation has not been determined, typical soil treatment technologies impact soil in the project area through excavation, heavy vehicle traffic, and erosion. Measures (described above) can be implemented to minimize these impacts. Following completion of remediation, long-term benefits would be realized by the soils in the area, due to decreased soil contaminant concentrations.

Under the No-Action alternative, no impacts would occur to the geology and soils at the alternative relocation sites, as no construction activities would occur. Remediation would occur at the existing RV middle and high school campus, which would present short-term adverse impacts and long-term benefits to the soil and geology at the RV middle and high school campus site. Short-term adverse impacts created by soil treatment activities can be minimized, as described above.

## **5.05 WATER RESOURCES**

### **5.05.01 Surface Water and Groundwater**

The proposed relocation action would cause an increase in impermeable areas and a reduction in vegetative cover at the new construction sites. Perimeter drainage ditches and surface water bodies would receive an increased amount of surface water drainage, in the form of stormwater runoff, from the sites. Improvements to the existing drainage systems at the proposed relocation sites could be required for construction of the new school facilities. The relocation action could also potentially cause an increase in the surface water flow at the project sites, if on-site wastewater treatment with discharge to a surface water body is utilized. The receiving surface water could also experience long-term adverse impacts from the wastewater treatment system effluent, associated with the biological and chemical constituents of typical domestic wastewater effluents. The on-site wastewater treatment method has not been determined for the proposed action, and would likely be determined following final selection of the alternative relocation site. The use of proper construction and operation techniques, erosion control measures, adherence to a Stormwater Pollution Prevention Plan (SWPPP), and following discharge requirements specified in a National Pollutant Discharge Elimination System (NPDES) permit would control impacts to water quality. The proposed action could also present long-term adverse impacts to groundwater quality if an on-site wastewater treatment system that utilizes below-ground effluent infiltration is utilized. Impacts can be minimized through proper siting, system design, and system operation. Remediation of the existing RV middle and high school campus is expected to occur under the relocation action. Implementation of the remediation activities could

result in long-term benefits to the surface water and groundwater quality at the RV middle and high school campus site, with reductions in soil contaminant concentrations.

Under the No-Action Alternative, no impacts to surface water or groundwater would occur at the alternative relocation sites, as no construction activities would occur. Remediation is expected to occur at the RV middle and high school campus. Long-term benefits could be realized by the surface water and groundwater at the RV middle and high school campus site through reduction in soil contaminant concentrations that would occur as a result of the remediation activities.

#### Wetlands

The proposed relocation action may present an adverse impact to the area on the Baker site that is under consideration as a wetland. Development of this potential isolated wetland area for the new school facilities would remove it from consideration as a wetland. Remediation activities at the current RV middle and high school campus could also present short-term impacts to the nearby wetland in the nature preserve area of the site. The short-term adverse impacts would be related to soil disturbance and vehicle traffic. Long-term impacts may also occur, with development of the campus site for commercial or industrial purposes. Any regrading of the site may potential affect surface runoff characteristics and impact the nearby wetland. Under Section 404 of the Clean Water Act, Permits would be required for the placement of fill in any wetland or water body. Coordination would be conducted to determine the types of permits required, if any, for construction or remediation activities conducted at the alternative relocation sites or at the RV middle and high school campus.

Under the No-Action Alternative, no impacts would occur to potential wetland areas on the alternative relocation sites, as no construction activities would occur. The wetland located in the nature preserve at the RV middle and high school site may experience short-term or long-term adverse impacts, as described above. Measures can be implemented to minimize impacts to the wetland, and applicable permits will be obtained with regard to the wetland.

## 5.06 BIOLOGICAL RESOURCES

### 5.06.01 Vegetation

The proposed relocation action would cause a seasonal loss of vegetation cover and permanent loss of potential vegetated areas at the alternative relocation sites. Similar to harvesting, the agricultural vegetation would be temporarily removed during construction activities. Minor, short-term impacts would occur during construction until the sites are revegetated with landscaping. Natural vegetation communities would not be impacted by construction on the agricultural lands or future commercial or industrial development on the existing RV middle and high school campus site. Short-term adverse impacts may be experienced by vegetation at the RV middle and high school campus site during remediation activities. Following completion of

remediation activities, long-term benefits would be expected, with the reduction in soil contaminant concentrations.

Under the No-Action Alternative, no impacts to vegetation would occur at the proposed alternative relocation sites, as no construction activities would occur. Remediation activities at the RV middle and high school campus could cause short-term adverse impacts to the vegetative cover at the site, through removal of the vegetative cover by excavation or vehicle traffic. Following completion of the remediation activities, the vegetative cover could experience long-term benefits through reduction in soil contaminant concentrations. .

#### **5.06.02 Wildlife**

The proposed relocation action would not significantly affect wildlife use on the alternative relocation sites. Construction of the new school facilities would decrease the amount of potential wildlife habitat, which is limited due to agricultural production. Mobile wildlife, such as birds and mammals, could move to similar, undisturbed habitat in adjacent areas. Less mobile species could be harmed by heavy equipment during construction. Similar minor wildlife impacts could occur from industrial development of the existing RV middle and high school campus site. No significant impacts to wildlife are expected to occur due to remediation of the RV middle and high school campus site.

Under the No-Action Alternative, no construction activities would take place; therefore, no impacts to wildlife would occur at the alternative relocation sites. Remediation activities conducted at the existing RV middle and high school site are not expected to create significant adverse impacts to wildlife at the site.

#### **5.06.03 Threatened or Endangered Species**

The proposed relocation action would have no significant impacts on threatened or endangered species. The alternative relocation sites do not have suitable habitat for the three species of concern (bald eagle, Indiana bat, eastern massasauga). Adjacent riparian habitat at the Baker site could provide potential summer habitat for the Indiana bat. However, no evidence of their presence at the site was noted during the site investigation, and construction of the school facilities at the Baker site can be managed such that there are no impacts to the adjacent riparian area. Remediation and subsequent commercial or industrial development of the existing RV middle and high school campus site would not impact any listed species, since none occur in the site vicinity.

Under the No-Action Alternative, no impacts to threatened or endangered species would occur at the alternative relocation sites, as no construction activities would occur. Remediation of the

existing RV middle and high school campus site would not impact any listed species, as none occur at the site.

## **5.07 CULTURAL RESOURCES**

The proposed relocation action is not expected to affect any significant archaeological resources at the Baker or Cook alternative relocation sites. Potential historic structures could be impacted by construction of new school facilities at the Cook site. An archaeological survey of the selected relocation site, conducted prior to construction, and continued SHPO coordination would prevent any significant impacts to cultural resources. No significant cultural resource impacts from future industrial development, or from remediation activities, would be expected to occur at the existing RV middle and high school campus site because of past disturbances from military operations and school construction.

Under the No-Action Alternative, no impacts to cultural resources would occur at the alternative relocation sites, as no construction activities would occur. Remediation activities at the RV middle and high school campus site will not impact cultural resources at the site, as none are currently known to exist.

## **5.08 SOCIOECONOMICS**

### **5.08.01 Population**

The proposed relocation action could have a beneficial impact on the population in the Marion area. The Ohio Department of Development has projected that the population in the Marion area will decrease from year 2000 estimates of 62,200 to year 2010 estimates of 59,400, which represents a 4.5% decrease in population. However, the building of new high school and middle school facilities could attract families into the school district, which would result in increased populations. If the proposed action is implemented, the Marion area population may not decrease as predicted by census information.

Under the no-action alternative, a slight decline in the population of Marion County would occur, as predicted by census information.

### **5.08.02 Employment and Economy**

The proposed relocation action would have a beneficial impact on employment and the economy of the Marion area. If the proposed action is implemented, the state and federal government will provide \$22,800,000 in funds to the school district for the construction of the new facility. It is

anticipated that this funding from outside the county will have a positive impact on the local and regional economy. Employment figures for the area would temporarily increase with the job staffing requirements generated during the construction of the proposed facilities. Likewise, economic benefits would be realized with the influx of construction-related trades persons and needs for supplies related to the construction. Further, the larger school facility could potentially require employment of additional staffing, which should also have a positive effect on the economy. Finally, as stated above, the population is predicted to decrease for Marion County in general, according to Census Bureau statistics. If the building of the new school attracts more families to the school district, the school district may have a larger tax base from which greater funds could be generated. This would also have a positive effect on the economy.

Under the No-Action Alternative, the economy of the area would not receive the benefits of the \$22,800,000 in funding provided by the state and federal government for the new facility. The school district would not be expected to hire additional employees, thereby precluding the potential increase in population of the county due to increased staffing needs. In addition, the economy would likely decline with the expected population decrease.

#### **5.08.03 Recreational Facilities**

The proposed relocation action would have a beneficial impact on school recreational facilities. Existing recreational facilities, such as the ball fields and nature preserve, have been closed on the RV middle and high school campus site. The new school facilities at an alternative site would provide recreational sports facilities such as a football field and stadium, football practice fields, an all-weather track, soccer fields, tennis courts, softball field, baseball fields, and two concession stands. The limited recreational facilities at the existing RV middle and high school campus site that would most likely be impacted by future commercial or industrial use would be replaced by new facilities at an alternative site.

Under the No-Action Alternative, currently closed recreational areas would remain closed at the existing RV middle and high school campus site until the completion of remediation activities. No beneficial effects on school recreational facilities would occur at alternative relocation sites.

#### **5.08.04 Educational Facilities**

The proposed relocation action would have a beneficial impact on educational facilities for the RVLSD. The new school facilities will provide a better learning environment, with greater potential for increased educational, vocational, and athletic opportunities.



## **5.09 INFRASTRUCTURE**

### **5.09.01 Potable Water**

The existing water supplies at the alternative relocation sites would not be sufficient for the new school facility. Ohio American would likely be the supplier of community water to the sites, with the nearest connection appropriately sized to meet the water demands of the new facility estimated to be over 2 miles from the sites. The exact route of the connecting pipe is unknown. Location and installation of the water supply lines will comply with applicable local, state and federal regulations. Potable water demands at the new school facilities could alternatively be met through construction of on-site water supply wells. New potable water connections at the alternative sites would not adversely impact public water supplies.

The No-Action Alternative would have no impact on potable water.

### **5.09.02 Electricity**

Electrical power supply lines run along the road right-of-ways at both of the alternative relocation sites. The new school facility would require connection to the existing power supply, which would not be adversely affected. The new facility is expected to require 3-phase power. A connection to an existing 3-phase power source is estimated to require installation of over a quarter-mile of new transmission line.

The No-Action Alternative would have no impact on electricity.

### **5.09.03 Wastewater**

The wastewater treatment method for the proposed facility has not been determined. The Marion County Wastewater Department would be the likely supplier of public wastewater collection and treatment facilities to the alternative relocation sites. No public wastewater treatment facilities currently exist at the Baker and Cook sites. It is estimated that approximately 3 miles of new sanitary sewer line would need to be extended to the Cook site, and approximately 2.4 miles of new sanitary sewer line would need to be extended to the Baker site. The exact route of the connecting pipe is unknown, but location and installation of the new sewer lines would comply with applicable local, state and federal regulations. Connection to the existing community water supply system would not adversely impact the community wastewater treatment system. Installation of the connecting lines would create short-term adverse impacts associated with the trench construction and pipe installation. Alternately, wastewater may be treated on-site. Stringent biological wastewater treatment siting criteria must be met in order for an on-site system to be installed. Soil characteristics at the alternative sites may present limitations for on-

site waste disposal that utilizes below-ground soil infiltration, due to the slow permeability of the soils at the Baker and Cook sites. A wastewater treatment system may be installed that utilizes effluent discharge to surface water bodies. This type of system would be required to comply with NPDES permit requirements. On-site wastewater treatment systems would typically also generate wastewater sludges which would be disposed of off-site. Short-term adverse impacts may occur with installation of an on-site wastewater treatment system, through soil disturbance and heavy machinery traffic. Long-term adverse impacts may occur from on-site wastewater treatment, associated with the discharge of wastewater effluent to either receiving surface water bodies or below-ground soil and groundwater.

The No-Action Alternative would have no impact on wastewater.

#### **5.09.04 Transportation**

Short-term adverse impacts on local transportation may result from increased truck traffic for the construction activities associated with the proposed action at the alternative relocation sites. Following completion of construction activities, vehicular traffic will increase at the alternative relocation sites due to school operation. The new school facility is expected to have approximately 800 parking spaces. Vehicular traffic will also increase with students being dropped off and picked up at the facility. In addition, the 19 school buses will be transporting the high school and middle school students to and from the facility. With potential siting of the school bus garage at the new facility, bus traffic could also include buses departing from and arriving to the facility for transportation of the elementary students. Vehicular traffic is expected to increase during the school days, as well as during sporting events or other school-related events. Implementation of the proposed alternative will therefore have significant adverse impacts at the alternative location sites. However, measures can be implemented to control transportation impacts. Plans for the new school facility may include a turning lane across the road frontage of the property. Currently, a two-lane road exists at the Baker and Cook sites. Traffic along the roadways would be impacted during construction of the turning lane. Alternatively, a traffic light could be installed to manage traffic entering or departing from the facility. As remediation will occur at the existing RV middle and high school site, implementation of the proposed alternative will have short-term adverse impacts to transportation. These impacts are associated with the possibly heavy equipment and increased vehicular traffic to the remediation area. Subsequent use of the site for commercial or industrial purposes would not create significant impacts on transportation.

The No-Action Alternative would present short-term adverse impacts at the existing RV middle and high school campus site, occurring during remediation activities. The impacts would result from increased vehicular traffic and possibly heavy equipment. These impacts can be controlled through traffic safety and management plans. In addition, long-term adverse impacts would occur at the existing RV middle and high school, as the current transportation concerns would continue and possibly worsen.

## **5.10 HAZARDOUS MATERIALS**

Hazardous materials associated with the construction activities for the proposed action will need to be handled according to applicable federal and state regulations. Apparent sources of hazardous materials in the new facilities would be laboratory chemicals, cleaning supplies, and lawn care products (including fertilizers). The application of lawn care products would include application on recreational areas such as athletic fields. The existing chemistry lab currently has an acid neutralization tank for treatment of used chemicals. It is expected that the new facilities will mimic the existing procedures for handling of hazardous chemicals, including cleaning and maintenance supplies. With implementation of the proposed action, the existing environmental contamination at the RV middle and high school site would be remediated to industrial clean up standards. In addition, the remediation activities would commence following relocation of the students, removing them from potential exposure during remediation. The proposed relocation action would therefore have long-term beneficial impacts by reducing the risk of exposure to contaminants identified at the former disposal area at the existing RV middle and high school site.

The No-Action Alternative would not present any impacts for hazardous materials at the alternative relocation sites. Remediation would occur at the existing RV middle and high school campus site, while the facility is used for institutional purposes. Short-term adverse impacts could occur during remediation activities. However, the remediation would have long-term beneficial impacts by reducing the risk of exposure to contaminants present at the RV middle and high school site.

## **5.11 MITIGATION MEASURES**

No mitigation measures are proposed for the relocation action since no significant adverse impacts are expected to occur from relocation and construction of new RV middle and high school facilities. Significant beneficial socioeconomic effects would occur from the proposed relocation action.

## **5.12 CUMULATIVE EFFECTS**

No adverse cumulative effects would occur from the proposed relocation action or the no-action alternative.

### **5.13 SUMMARY OF IMPACTS OF THE PREFERRED ACTION**

The preferred action is the relocation and construction of a new RV middle and high school campus at one of the three alternative sites. The preferred action would have more significant beneficial impacts than adverse impacts on the environment. No significant adverse impacts are expected to occur to natural resources including geology, soils, vegetation, wildlife, and threatened and endangered species. Long-term impacts may occur to surface water and groundwater related to operation of an on-site wastewater treatment system. Temporary short-term impacts could occur to soils and surface waters during construction. Minor impacts to vegetation and wildlife would occur from new construction on alternative sites.

Overall, the preferred action would have beneficial impacts on the human environment. Relocation of the RV middle and high school campus from a suspected contaminated hazardous waste site would benefit the affected community by reducing potential health risks. Socioeconomic factors such as population, economy, employment recreational facilities, and educational facilities would benefit from the construction of new school facilities. Adverse impacts, such as increased traffic and noise levels, at adjacent residences would be outweighed by the positive effects of the preferred action. No significant adverse effects would occur to cultural resources, air quality, or utilities (potable water, electricity, and wastewater). A summary of the impacts and the descriptors for the preferred action is provided in Table 1 of this report.

### **5.14 SUMMARY OF IMPACTS OF THE NO-ACTION ALTERNATIVE**

The No-Action Alternative would have beneficial environmental impacts, attributed to the remediation of the RV middle and high school campus site. The No-Action Alternative would also present no potential adverse impacts to natural resources at the alternative location sites. Similarly, no adverse impacts such as increased traffic and noise levels would occur with the No-Action Alternative. However, no significant beneficial socioeconomic impacts to the affected community would occur with the No-Action Alternative. Improved economic and employment opportunities would not occur without construction of the new facilities. Table 1 shows a summary of impacts for the No-Action Alternative.

### **5.15 CONCLUSIONS**

Based on the evaluation of environmental impacts for the proposed alternatives, the preferred action is the relocation and construction of new RV middle and high school facilities at one of the three alternative sites. The preferred action would have more significant beneficial effects than adverse impacts on the environment. Adverse impacts would be outweighed by the positive effects of the preferred action.

## 6.0 REFERENCES

- ERM-Midwest, Inc., 1990. Report on the Environmental Assessment of Former Marion Engineer Depot, Marion, Ohio. June 1990.
- Floyd Browne Associates, Inc., 1997. Environmental Investigation at the River Valley School Property. September 1997.
- Lawhon & Associates, Inc. for Ohio Environmental Protection Agency, 1997. Interim Report for River Valley Local Schools, Marion. December 1997.
- Montgomery Watson, 1997. Total Environmental Restoration Contract (TERC), Volume IV, Quality Management. May 1997.
- Montgomery Watson, 1998. Remedial Investigation/Feasibility Study, Quality Assurance Project Plan (QAPP). July 1998.
- Montgomery Watson, 1998. Preliminary Remedial Investigation Report, November 1998.
- Montgomery Watson, 2000. Draft Ambient Air Survey of the River Valley School Property, Marion, Ohio. February 2000.
- Ohio EPA, 1998. Field Investigation Report for River Valley Local Schools, Marion, Ohio. October 1998.
- Ohio EPA, 1999. Marion Air Toxics Study. March, 1999.
- Schafer Crowell, Katie, 1979. Ground Water Resources of Marion County Map, Ohio Department of Natural Resources. 1979.
- U.S. Department of Agriculture, Soil Conservation Service, 1989. Soil Survey of Marion County, Ohio. March 1989.
- U.S. Environmental Protection Agency (USEPA), 1993b. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA. Office of Emergency and Remedial Response. October 1988.
- Vormelker, Joel, 1985. Drift Thickness Map of Marion County Ohio, Ohio Department of Natural Resources. 1985.

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## Tables



Table 1

Summary of Potential Effects of the Preferred Action Alternatives and the No-Action Alternative

Environmental Assessment for the Relocation of the  
River Valley Middle and High School Campus  
Marion, Ohio

| Section                         | Subsection                              | Preferred Action Alternatives |                   |                | No-Action Alternative |                   |                |
|---------------------------------|---|-------------------------------|-------------------|----------------|-----------------------|-------------------|----------------|
|                                 |   | No Adverse Effect             | Beneficial Effect | Adverse Effect | No Adverse Effect     | Beneficial Effect | Adverse Effect |
| <b>5.1 Land Use</b>             | 5.1 Adjacent Land Use                   |                               |                   | LT             | LT                    |                   |                |
|                                 | 5.1 Recreational Land Use               |                               | LT                | ST             |                       | LT                | ST             |
|                                 | 5.1 Military Land Use                   | LT                            |                   |                | LT                    |                   |                |
|                                 | 5.1.1 Farmland Protection Policy Act    | LT                            |                   |                | LT                    |                   |                |
| <b>5.2 Air Quality</b>          |   |                               |                   | ST             |                       |                   | ST             |
| <b>5.3 Noise</b>                |   |                               |                   | LT             |                       |                   | ST             |
| <b>5.4 Geology and Soils</b>    | 5.4 Geology                             | LT                            |                   |                | LT                    |                   |                |
|                                 | 5.4 Soils                               |                               | LT                | ST             |                       | LT                | ST             |
| <b>5.5 Water Resources</b>      | 5.5.1 Surface Waters                    |                               |                   | ST             | LT                    |                   |                |
|                                 | 5.5.2 Groundwater                       | LT                            |                   |                |                       | LT                |                |
| <b>5.6 Biological Resources</b> | 5.6.1 Vegetation                        |                               |                   | M              | LT                    |                   |                |
|                                 | 5.6.2 Wildlife                          | LT                            |                   |                | LT                    |                   |                |
|                                 | 5.6.3 Threatened and Endangered Species | LT                            |                   |                | LT                    |                   |                |
| <b>5.7 Cultural Resources</b>   |   | LT                            |                   |                | LT                    |                   |                |

EXPLANATION: LT=Long-Term Effect  
ST=Short-Term Effect  
M=Minor Effect

Table 1 (Continued)

Summary of Potential Effects of the Preferred Action Alternatives and the No-Action Alternative

Environmental Assessment for the Relocation of the  
River Valley Middle and High School Campus  
Marion, Ohio

| Section                         | Subsection                    | Preferred Action Alternatives |                   |                | No-Action Alternative |                   |                |
|---------------------------------|-------------------------------|-------------------------------|-------------------|----------------|-----------------------|-------------------|----------------|
|                                 |                               | No Adverse Effect             | Beneficial Effect | Adverse Effect | No Adverse Effect     | Beneficial Effect | Adverse Effect |
| <b>5.8 Socioeconomics</b>       | 5.8.1 Population              |                               | LT                |                | LT                    |                   |                |
|                                 | 5.8.2 Employment              |                               | LT                |                | LT                    |                   |                |
|                                 | 5.8.2 Economy                 |                               | LT                |                | LT                    |                   |                |
|                                 | 5.8.3 Recreational Facilities |                               | LT                |                |                       |                   | ST             |
|                                 | 5.8.3 Educational Facilities  |                               | LT                |                |                       |                   | LT             |
| <b>5.9 Infrastructure</b>       | 5.9.1 Potable Water           |                               |                   | ST             | LT                    |                   |                |
|                                 | 5.9.2 Electricity             |                               |                   | ST             | LT                    |                   |                |
|                                 | 5.9.3 Wastewater              |                               |                   | LT*            | LT                    |                   |                |
|                                 | 5.9.4 Transportation          |                               |                   | LT             |                       |                   | ST             |
| <b>5.10 Hazardous Materials</b> |                               |                               | LT                |                |                       | LT                | ST             |

EXPLANATION: LT=Long-Term Effect

ST=Short-term Effect

M=Minor Effect

\*=Extent of Effect Requires Further Evaluation

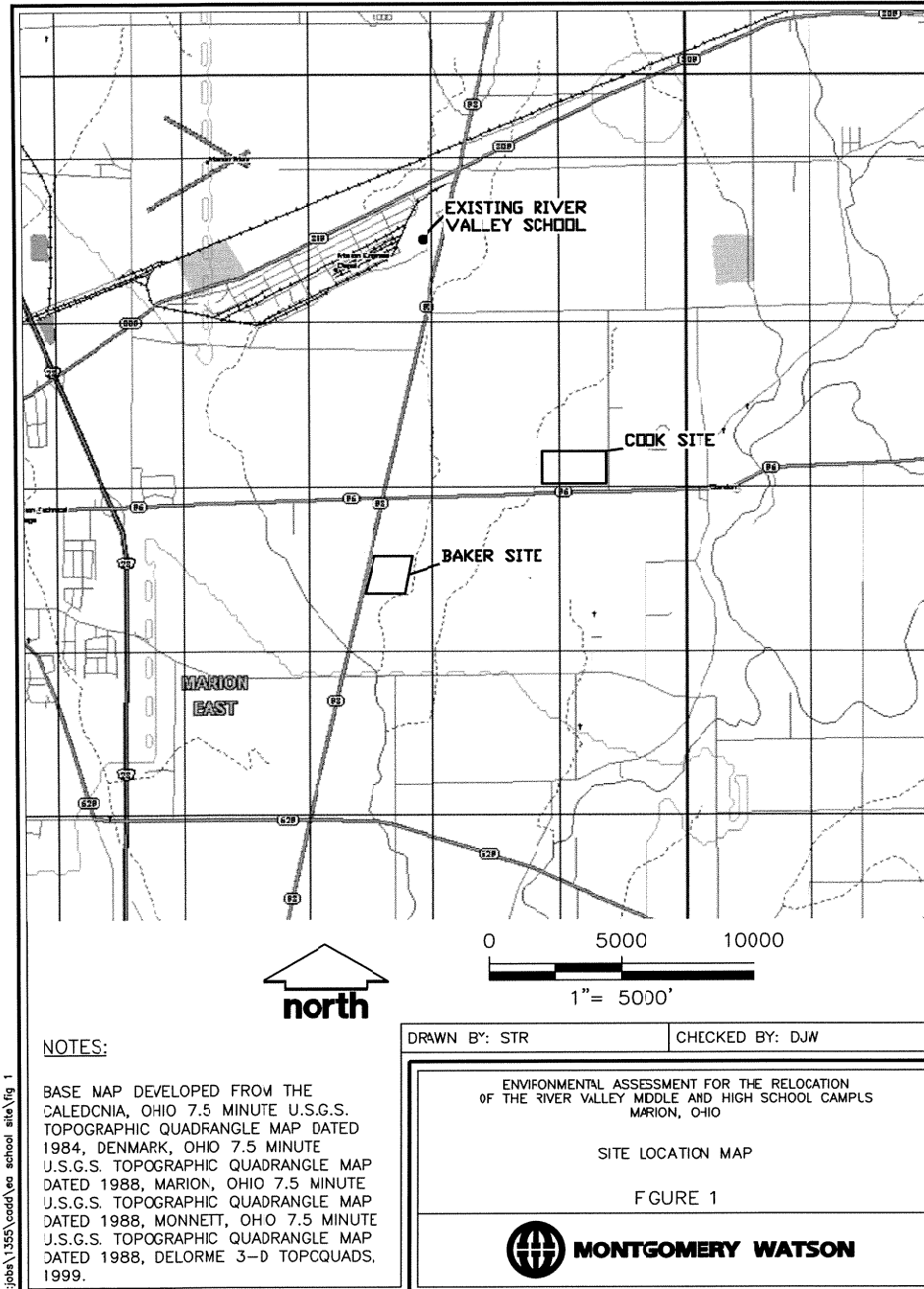
Table 2

## Site Selection Rating Sheet

Environmental Assessment for the Relocation of the  
River Valley Middle and High School Campus  
Marion, Ohio

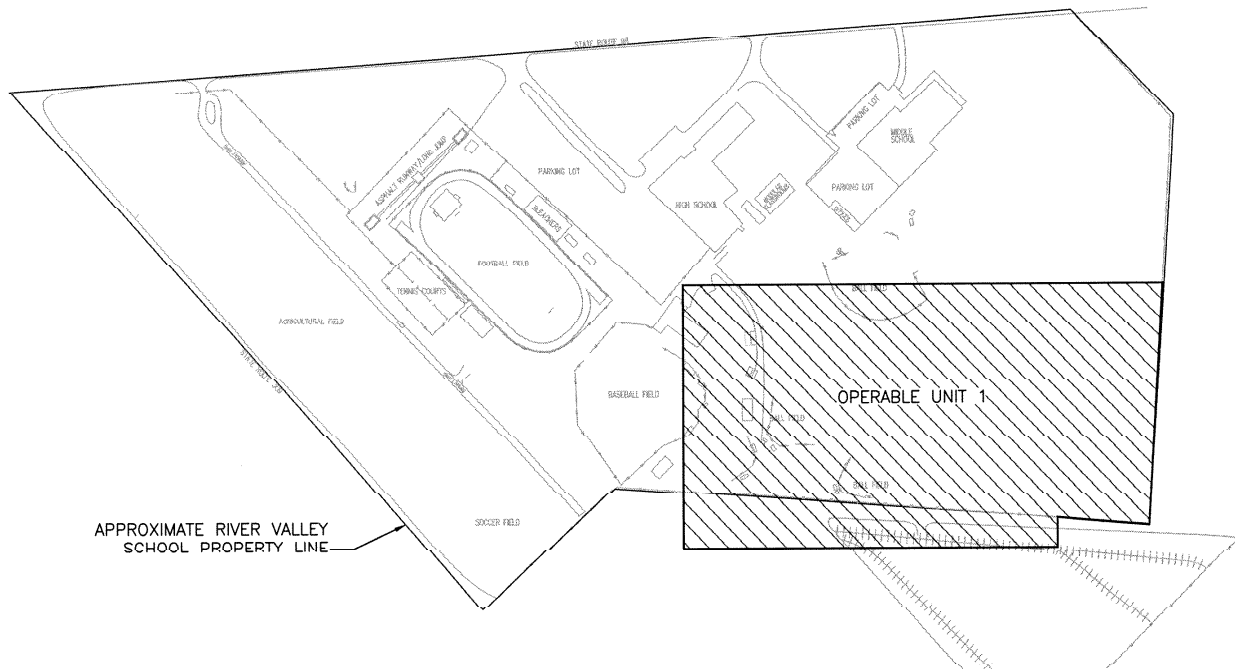
| CRITERIA  | SCORE | WEIGHT | TOTAL |
|---|-------|--------|-------|
| <b>LOCATION INFLUENCES</b><br>Location with respect to community, students, and users of facility. Are natural resources available for educational purposes? Zoning?  |       |        |       |
| <b>ENVIRONMENT</b><br>Views and approach unobstructed? Traffic noise or other heavy noises? Sources of objectionable atmospheric conditions?  |       |        |       |
| <b>ACCESSIBILITY</b><br>Natural or man-made hazards? Is the site readily and safely accessible? Are there prevailing travel conditions such as steep grades, no sidewalks, winding narrow streets? Can the site be safely entered and exited? |       |        |       |
| <b>SITE/TOPOGRAPHY/SUBSURFACE</b><br>Is the site well drained? Are there open spaces?   |       |        |       |
| <b>SITE PREPARATION</b><br>Does it appear that the site can be easily graded? How do the relative costs of site acquisition and site preparation compare?   |       |        |       |
| <b>INFRASTRUCTURE (UTILITIES)</b><br>Availability of gas, water, sewerage, electricity, data networks?  |       |        |       |
| <b>ORIENTATION AND FIT</b><br>Ability to fit building and site amenities on parcel. Can building be located on the site to best utilize solar angles during school hours? Will prevailing winds affect the building?                          |       |        |       |
| <b>FLEXIBILITY</b><br>Could this site and facilities be converted to changing educational, recreational, and community needs of the district? Enough site to accommodate some growth. Educational adaptability.                               |       |        |       |
| <b>SITE DEVELOPMENT</b><br>Cost of landscaping and beautification? Optimum relationship of buildings and facilities to each other?  |       |        |       |
| <b>PUBLIC SERVICES</b><br>Are refuse/garbage disposal services and fire/police protection available?  |       |        |       |
| <b>OUTDOOR ACTIVITIES DESIRED</b><br>Will the site be conducive to special needs such as outdoor instructional athletic areas, recreational areas, spectator games, etc.?   |       |        |       |
| <b>UNDESIRABLE ELEMENTS IDENTIFIED</b><br>Are there negative moral influences/nuisances nearby? Are there overhead high voltage transmission lines or storage of inflammable/toxic materials nearby?  |       |        |       |
| <b>MAINTENANCE IMPLICATIONS</b><br>Potential difficulties to be encountered due to topography soil conditions, gardening, climate, etc.?  |       |        |       |
| <b>POLITICAL IMPLICATIONS</b><br>Group or general public reactions to the selection of the site?  |       |        |       |
| <b>MASTER PLANNING FACTORS CONSIDERED</b><br>Is the site in the best interests of the school and community?   |       |        |       |
| <b>GRAND TOTAL FOR SITE</b>   |       |        |       |

## Figures



J:\jobs\1355\cedd\ea school site\fig 1

j:\johs\1305\cadd\va school site\fig 2



LEGEND:



OU1 BOUNDARY



0 250' 500'

BASE MAP SOURCE: LAWHON & ASSOCIATES, INC.,  
DECEMBER 1997

DRAWN BY: STR

CHECKED BY: DJW

ENVIRONMENTAL ASSESSMENT FOR THE RELOCATION  
OF THE RIVER VALLEY MIDDLE AND HIGH SCHOOL CAMPUS  
MARION, OHIO

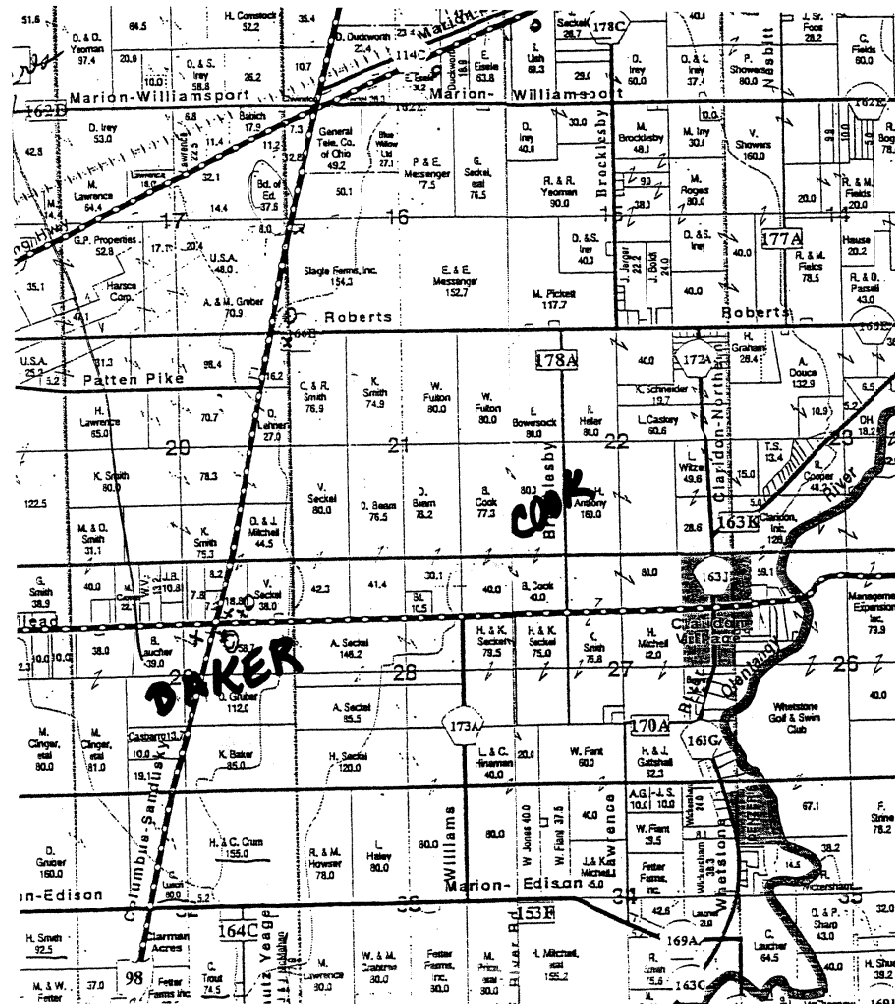
RVS SITE MAP WITH OU1 LOCATION

FIGURE 2



MONTGOMERY WATSON

U:\jobs\1355\cond\eo school site (fig 3) et: 12/13/00



NOTE:  
MAP NOT TO SCALE

DRAWN BY: STR

CHECKED BY: DJW

ENVIRONMENTAL ASSESSMENT FOR THE RELOCATION  
OF THE RIVER VALLEY MIDDLE AND HIGH SCHOOL CAMPUS  
MARION, OHIO

ALTERNATE SITE LOCATION MAP

FIGURE 3



MONTGOMERY WATSON